

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1.-16. (Canceled)

17. (New) An electric machine comprising:

a substantially cylindrical stator frame constructed of a stack of electrical steel laminations;

a plurality of individual stator magnetisable pole members made of a soft magnetic composite material fixably supported within the stator frame; and

a rotor having permanent magnetic pole pieces;

wherein each of the plurality of individual stator magnetisable pole members has coil windings about the stator magnetisable pole member, pre-wound before being fixably supported in the stator frame,

wherein each of the plurality of individual stator magnetisable pole members has an inner peripheral rim and an outer circumferential rim separated by a longitudinal column to which the coil is pre-wound before each of the plurality of individual stator magnetisable pole members is fixably supported within the stator frame,

wherein the longitudinal column is of a length such that the wounded coil does not extend out over and above the inner and outer rims.

18. (New) The electric machine of claim 17, wherein the stator frame provides an inner substantially circular ring to fixably support the plurality of individual stator magnetisable pole members thereon, such that the outer circumferential rim of each of the plurality of

individual stator magnetisable pole members and an inner face of the circular ring of the stator frame engage in a tongue and groove fit.

19. (New) The electric machine of claim 18, wherein the circumferential rim includes a tongue longitudinally configured substantially down a length thereof, and the inner face of the circular ring of the stator frame includes a series of grooves about the ring inner face, so that each of the plurality of individual stator magnetisable pole members may be positioned in a substantially annular arrangement about the circular ring.
20. (New) The electric machine of claim 18, wherein the inner circular ring of the stator frame comprises, adjacent to each of the plurality of individual stator magnetisable pole members, a flat section that is perpendicular to the adjacent individual stator magnetisable pole member.
21. (New) The electric machine of claim 17, wherein the inner peripheral rim and the outer circumferential rim of each of the plurality of individual stator pole members supported within the stator frame is disposed such that an air gap between the rotor and the stator are reduced.
22. (New) The electric motor according to claim 17, comprising six magnetisable pole pieces on the stator and four permanent pole pieces on the rotor.
23. (New) The electric machine according to claim 17, wherein the soft composite material is bonded iron.
24. (New) The electric machine according to claim 17, wherein each of the stack of electrical steel laminations of the frame has a shape such that, when assembled into the frame, an internal profile of the frame is non-circular, maximizing the amount of space available for coil pre-wound about each of the plurality of individual stator magnetisable pole members.

25. (New) An electric machine according to claim 17, wherein the electric machine is an electrical motor.
26. (New) An electric machine according to claim 17, wherein the electric machine is an electrical generator.
27. (New) An electric machine according to claim 17, wherein the electric machine is an electrical transformer.